

engineering data service

SYLVANIA

6BG6G

QUICK REFERENCE DATA

Pentode beam power amplifier designed for use as a horizontal deflection driver tube in television receivers using electromagnetic deflection.

MECHANICAL DATA

Bulb	ST-16
Base	Medium Shell Octal
Basing	5BT
Cap	Small
Cathode	Unipotential
Mounting Position	Vertical, Base Up or Down; Horizontal, With Plane of Pins 2 and 7 Vertical

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	900 Ma

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Control Grid to Plate	0.65 μμf Max.
Input	11.0 μμf
Output	6.5 μμf

RATINGS (Design Center Values — except as noted)

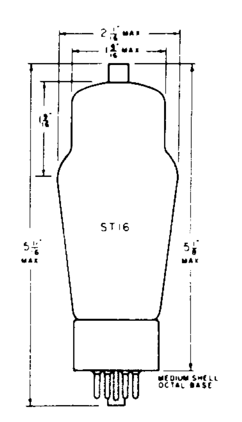
Horizontal Deflection Amplifier[1]

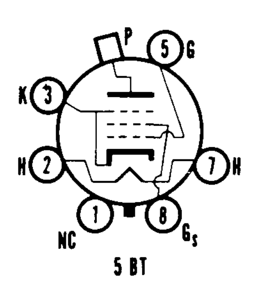
DC Plate Supply Voltage	700	Volts	Max.
Peak Positive Plate Voltage	6600	Volts	Abs. Max.
Peak Negative Plate Voltage	1500	Volts	Max.
DC Plate Current	100	Ma	Max.
Plate Dissipation	20	Watts	Max.
Screen Voltage	350	Volts	Max.
Screen Dissipation	3.2	Watts	Max.
Negative Control Grid Voltage	50	Volts	Max.
Peak Negative Control Grid Voltage	400	Volts	Max.
Control Grid Resistance	1.0	Megohm	Max.
Heater-Cathode Voltage	135	Volts	Max.
Bulb Temperature (at hottest point)	210°	C	Max.

TYPICAL OPERATING CONDITIONS[2]

Horizontal Deflection Amplifier[1]

DC Plate Supply Voltage		
From DC Power Supply	400	Volts
From DC Boost	150	Volts
Total Plate Supply Voltage	550	Volts
Screen Voltage	250	Volts
Cathode Bias Resistor	100	Ohms
Control Grid Signal Voltage		
Sawtooth Component	75	Volts
Negative Peaking Component	50	Volts
Plate Current	85	Ma
Screen Current	10	Ma
Peak Cathode Current	300	Ma
Average Control Grid Current	30	μa
Peak Positive Plate Voltage	5500	Volts
Peak Negative Plate Voltage	550	Volts
Control Grid Circuit Resistance	1.0	Megohm





NOTES:

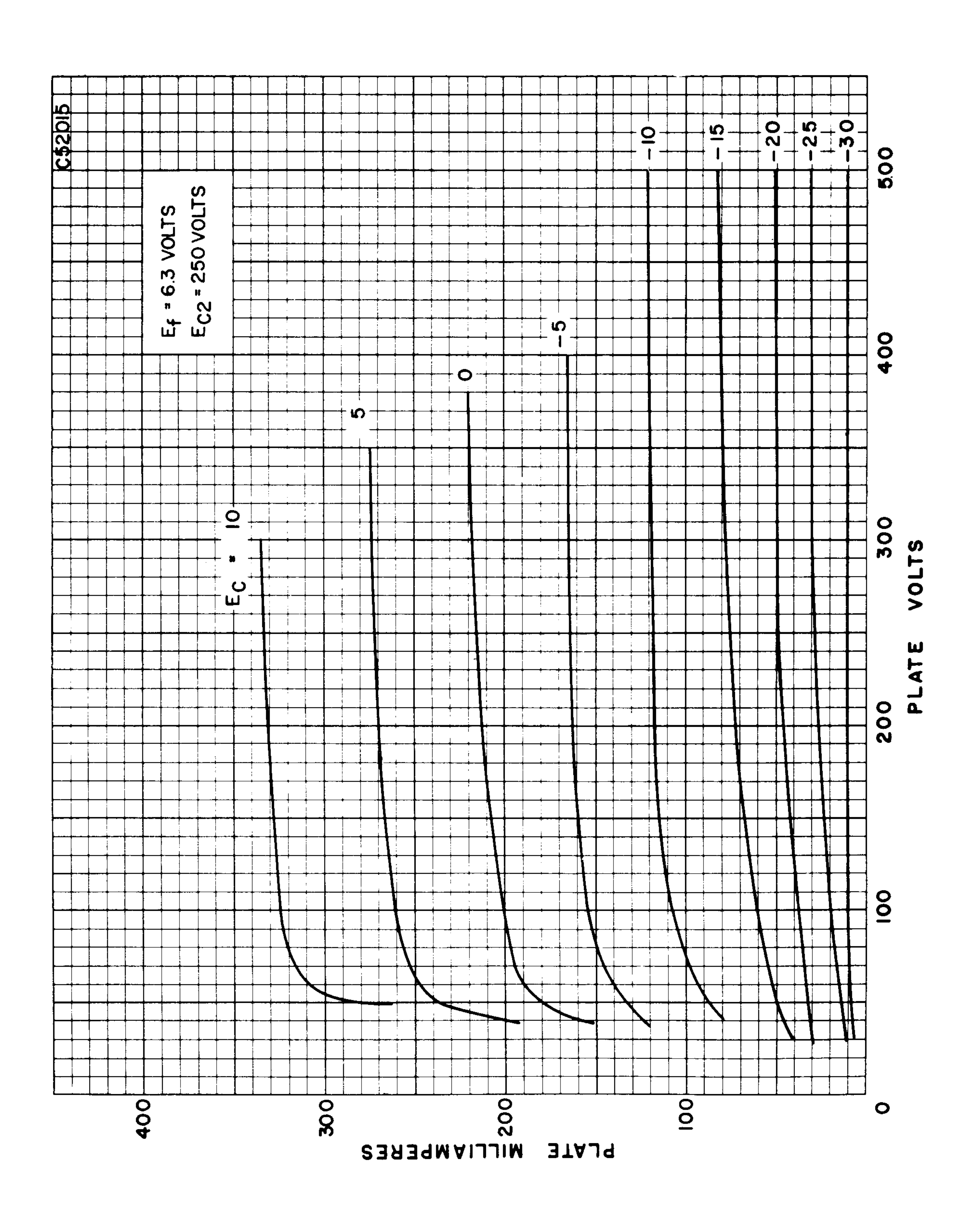
1. *For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations: Federal Communications Commission", the duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.*
2. *For 17" 70° deflection CR tube with 12 Kv second anode voltage.*

SYLVANIA ELECTRIC PRODUCTS INC.

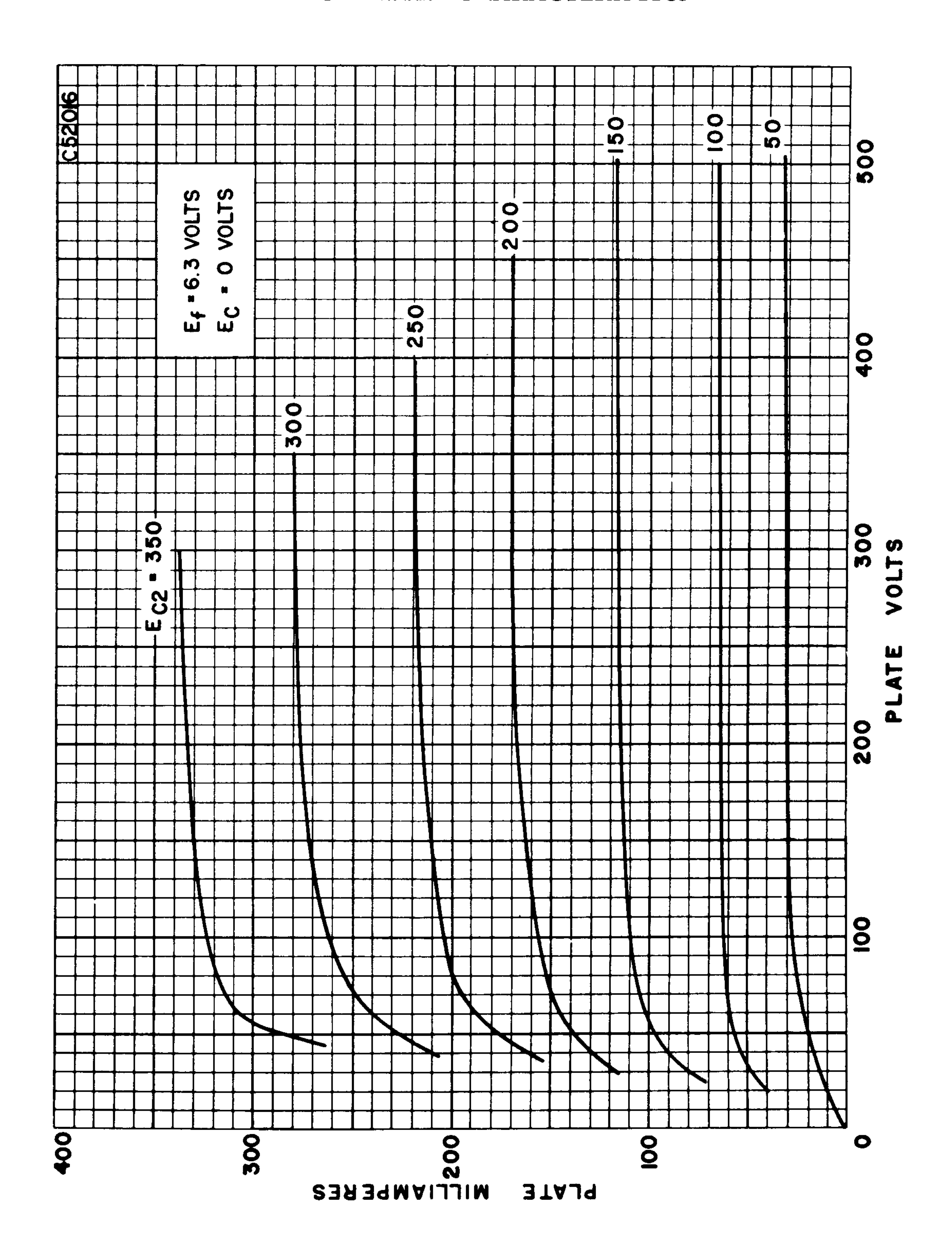
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AVERAGE PLATE CHARACTERISTICS



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